Equipment

FXG Corp
Raindrip Inc

Leaf Burners

Bock Industries Inc

Lighting Systems

Barebo Inc
Columbia Cascade Timber Co
GTE Sylvania
Intermatic Inc
Lighting Prods Div McGraw-Edison Co
Little Giant Pump Co Sub Tecumseh Prods Co
Musco Sports-Lighting Inc
Spring City Electric Mfg Co
Westinghouse Electric Corp Lamp Div
Wheel Spray Corp

Lightning Protection Systems

Independent Protection Co

Litter Receptacles

Architectural Precast Inc
BigToys
Clean City Squares Inc
Columbia Cascade Timber Co
FXG Corp
Kay Park Rec Corp
Landscape Structures Inc
Lesco Inc
Miracle Recreation Equipment Co
Standard Golf Co

Loaders

American Trencher Inc
Atwater Strong Div
Bingham Equipment Co
Bush Hog
J I Case
J I Case Drott Div
Caterpillar Tractor Co
Charles Machine Works Inc
Howard S Crane Inc
Deere & Co
Dynamic Industries Inc
Engineering Products Co
Ford Tractor Operations
International Harvester Co
Kubota Tractor Corp
Little Giant Products Inc
Long Mfg NC Inc
Massey-Ferguson
Melroe Co Div Clark Equipment
Prentek Corp
Spercy New Holland
Turf Vac Corp
Wheel Horse Products Inc
Yanmar Tractor (USA) Inc

Loading Ramps

Giant Vac Mfg Inc
Magline Inc
Meicher Mfg Co

Morfeo takes a stand!

To give you the best full line of gasoline powered portable outdoor equipment.

Twelve trimmer/cutters equipped with everything from brush and/or weed blades to mono-filament heads.

Each designed with HOFFCO QUALITY and RELIABILITY.

Dependable engines, long wearing clutches, sturdy transmissions and patented flexible drive shafts.

A 3-point suspension system (Guardian Triangle) on all bladed models for operator security and comfort.

Always First
Always Outlasts
36 Years . . . .
Est. 1949

Remember ... we don’t come apart when you need parts ... we deliver.
Our Parts and Service Program is a unique part of Hoffco’s total selling program . . .
It works with you and for you.

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36 Years . . . .
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Hoffco takes a stand!

HOFFCO
is the only name you need to remember for a full line of trimmer/cutters and blowers!

Brush, weeds or grass to clear-up or clean-up whatever the job application . . . it’s HOFFCO. So stand up, be counted ... for more sales, more profits, more customer traffic.

See your nearest HOFFCO distributor or write:

HOFFCO INC.
358 N.W. "F" St., Richmond, IN 47374 Telex 20212

Circle No. 126 on Reader Inquiry Card

SEPTEMBER 1985/WEEDS TREES & TURF 71
### Log Splitters
- Bingham Equipment Co
- Bush Hog
- J I Case
- Comanche Steel Products Inc
- Deere & Co
- Didier Log Splitters Mfg
- Dynamic Industries Inc
- Ford Tractor Operations
- FXG Corp
- Giant Vac Mfg Inc
- Carl Heald Inc
- Karl Kuemmerling Inc
- Lindig Mfg Corp
- Morbark Industries Inc
- MTD Products Inc
- Poulan/Weed Eater
- Promark Products Inc
- Robush Engineering Co
- Vermeer Mfg Co
- Wheel Horse Products Inc
- Winkler Hydraulics
- Yanmar Tractor (USA) Inc

### Mower Accessories
- Middlesworth Mfg & Engineering Inc

### Mower Parts
- Alamo Group
- Buck Haven
- Bunton Co
- Bush Hog
- Comet Industries/Div of Hoffco
- Goodall Div Bunton Co
- Hoffco Inc
- International Harvester Co
- Lawnboy Prod Group
- Lesco Inc
- MoTrim Inc
- MTD Products Inc
- Power Lawnmower Parts Inc
- Ransomes Inc
- Sensation Power Equipment
- Simplicity Mfg Inc
- Visimo Mfg Co
- Yazoo Mfg Co

### Mowers, Rotary
- Alamo Group
- American Honda Motor
- Ariens Co
- Bingham Equipment Co
- Bomford & Evershed Ltd
- Bunton Co
- Bush Hog
- J I Case
- Deere & Co
- Edwards Equipment Co
- Engineering Products Co
- Excel Industries Inc
- Exmark Mfg Co
- Ford Tractor Operations
- Giant Vac Mfg Inc
- Goodall Div Bunton Co
- Grasshopper Co
- Gravely
- Haban Mfg Co
- Heckendorn Mfg Co
- Homelite Div Textron Inc
- Ingersoll Equipment Co
- International Harvester Co
- Jacobsen Div Textron Inc
- F D Kees Mfg Co
- Kubota Tractor Corp
- Kutt-Kwick Corp
- Lawnboy Prod Group
- Locke Mfg Inc
- Long Mfg NC Inc
- Magic Circle Corp
- Massey-Ferguson
- Middlesworth Mfg & Engineering Inc
- MoTrim Inc
- MTD Products Inc
- Nunes Mfg
- OMC Lincoln/Cushman-Ryan
- Ransomes Inc
- Ryan Turf/OMC Lincoln
- Sarlo Power Mowers Inc
- Scag Power Equipment Inc
- Sensation Power Equipment
- Simplicity Mfg Inc
- Smithco Inc
- Smithco Inc
- Snapper Products Equipment
- Solo Inc
- Tiger Corp
- Toro Co/Commercial Prods Div
- Tradewinds Inc
- Turner International Eng Ltd
- United Farm Tools Inc
- Vicon Farm Machinery Inc
- Walker Mfg Co
- Wheel Horse Products Inc
- White Outdoor Products
- Wilsey-D Inc
- Woods Div Hesston Corp
- Yazoo Mfg Co

### Mowers, Reel
- Brouwer Turf Equipment Ltd
- Jacobsen Div Textron Inc
- Jerry Clipper
- Lesco Inc
- Locke Mfg Inc
- MTD Products Inc
- National Mower Co
- Princeton Mfg Co
- Ransomes Inc
- Roseman Mower Corp
- Toro Co/Commercial Prods Div
- Turner International Eng Ltd
- Wheel Horse Products Inc

### Mowers, Sickle Bar
- Alamo Group
- Bingham Equipment Co
- Deere & Co
- Gravely
- Haban Mfg Co
- International Harvester Co
- Kinco Mfg
- MoTrim Inc
- Sensation Power Equipment
- Solo Inc
- Sperry New Holland
INTRODUCING
the
BROUWER GREENSMOWER

THE NEW BROUWER GREENSMOWER... built to meet the challenge of the modern golf course.

For a superb "tournament finish" on your greens trust the Brouwer Greensmower to deliver, cut after cut. Compare it to the competition and see that feature after feature it comes out ahead.

Features like: special hardened alloy steel bedknife and cast iron holder; bearing mounted gears in the traction and reel drives; gear engage from main drive on the reel clutch; 1/8 in. to 1-3/16 in. setting for height of cut; self pre-load taper roller bearings; transport sulky and many more.

A combination of built-in quality engineering features that no other greensmower can match and that guarantees your greens will be the envy of others who choose to miss the "finest cut" — CUT THE BROUWER WAY.
### Equipment

**continued**

#### Mulchers, Hydraulic
- Bingham Equipment Co
- Bowie Industries Inc
- Finn Corp
- Goossen Industries
- Reclamare Co
- Reinco Inc
- Thermoguard Co
- Weldco (WA) Inc

#### Net Layers
- American Excelsior Co

#### Nozzles & Accessories
- Broyhill Co
- Chemlène Co
- Citrus Systems Inc
- Delavan Corp
- Encap Products Co
- Friend Mfg Corp
- Gilmour Mfg Co
- Hardie Irrigation
- Hotsy Corp
- Hydro Rain
- Hypro Div Lear Siegler Inc
- Lesco Inc
- Liqui'Lawn Corp
- Marco Div of Llo-Mar Mfg Co
- Melnor Industries
- Micron Corp
- Pex Inc
- Power Spray Technology Inc
- Sorensen Sprayers Inc
- Spraying Devices Inc
- Spraying Systems Co
- Strong Ent Inc
- Thorco/Master Sprayers
- Tri-Con Inc
- Westheffer Co

#### Netting
- American Excelsior Co
- Arthur Enterprises Inc
- J A Cissel Mfg Co
- Conved Corp
- Covers Unlimited
- Ross Daniels Inc
- Delmarva Textile Co
- Eaton Brothers Corp
- International Reforestation Suppliers Inc
- Rothwell Seeds Ltd

#### Net Layers
- American Excelsior Co

#### Pipe
- Advanced Drainage Systems Inc
- Comanche Steel Products Inc
- Westheffer Co

#### Planters
- Architectural Precast Inc
- Beck Mfg Co
- BigToys
- Clean City Squares Inc
- Columbia Cascade Timber Co
- Deep Root Corp
- Ellis Mfg Co
- International Harvester Co
- International Reforestation Suppliers Inc
- Lesco Inc
- Miracle Recreation Equipment Co
- Parker Interior Plantscape
- L J Rench & Co

#### Plants & Trees
- Parker Interior Plantscape
- L J Rench & Co

#### Play Structures
- American Playground Device Co
- BigToys
- Columbia Cascade Timber Co
- Delmer F Harris Co
- Landscape Structures Inc
- Miracle Recreation Equipment Co
- Playworld Systems

#### Plows, Sand Trap
- Jacobsen Div Textron Inc
- Smithco Inc
- Toro Co/Commercial Prods Div

#### Pools, Decorative
- L J Rench & Co

#### Post Drivers
- Deere & Co
- Dynamic Industries Inc
- Guest Industries Inc
- McMillen Div
- Rhino Sales Corp
- Shaver Mfg Co
- Work saver Inc

#### Post Hole Diggers
- Allegheny International Hardware Group
- American Standard Co
- Ames Co
- Arthur Enterprises Inc
- Bartlett Mfg Co
- Chisholm-Ryder Co
- Corona Clipper Co
- Echo Inc
- Emblide Corp
- Fairmont Hydraulics
- Fanno Saw Works
- Friend Mfg Corp
- Gilmour Mfg Co
- HMC/The Green Machine
- International Reforestation Suppliers Inc
- Jameson Corp
- Karl Kueumerling Inc
- Safety Test & Equipment Co
- Seymour Smith & Son Inc
- Stanley Hydraulic Tools
- Vandermolen Corp
- D J Wilson Co
- Hermann A Wirth

#### Pruners, Hedge
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- Arthur Enterprises Inc
- Bartlett Mfg Co
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- Corona Clipper Co
- Echo Inc
- Emblide Corp
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- D J Wilson Co
- Hermann A Wirth

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- Chisholm-Ryder Co
- Corona Clipper Co
- Echo Inc
- Emblide Corp
- Fairmont Hydraulics
- Fanno Saw Works
- Friend Mfg Corp
- Gilmour Mfg Co

#### Pressure Gauges
- Broyhill Co
- Encap Products Co
- FMC Corp
- Friend Mfg Corp
- Hypro Div Lear Siegler Inc
- Irrometer Co
- Minnesota Wanner Co
- Pex Inc
- Power Spray Technology Inc
- Smithco Inc
- Spraying Devices Inc
- Strong Ent Inc
- Thorco/Master Sprayers
- Tuflex Mfg Co
- Westheffer Co

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A GUIDE TO LANDSCAPE MANAGEMENT
New Team prevents your weeds with all-season stamina. It's gentle on cool season turf grass, including bluegrass, ryegrass and other fairway grass species. And new Team pre-emergence herbicide consistently delivers better control, longer control for your crabgrass. It also provides head-to-head goosegrass control.

New Team spreads very easily. The clay carrier makes equipment calibration simpler and application more accurate. It also reduces dust problems.

Call time-out on crabgrass and goosegrass on your turf, for all season. With new Team.

Talk to your Elanco distributor soon.

Or write:
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Team™—(benefin™ + trifluralin, Elanco Products Company)
Refer to the Team label for proper application instructions.

Put down new Team™ this spring.

Or put up with crabgrass and goosegrass this summer.
The science of landscape management today is more of planning ahead than reacting to problems. Products that prevent weed problems with predictable control have replaced emergencies. When curative products are required, the problem is often less serious when preventative measures were originally taken than if they were not. Advances in preventative products, such as preemergence herbicides, have improved the predictability of results landscape managers depend on. These advances include longer length of control, control of a wider range of target pests or weeds, and products designed to fit the needs of various regions of the country depending on climactic conditions.

Preemergence herbicides and combinations of preemergence herbicides with fertilizers and other compounds provide labor savings and more precise control, allowing landscape managers to more fully utilize their time and resource allocations.

With this new technology, the landscape manager must establish new standards by which to compare products. Cost per package is no longer a sufficient comparison. Lower rates per acre, longer length of control, broader spectrum of control, and greater effectiveness and residual must be figured into the equation.

New compounds are more effective in smaller quantities, reflecting a concern for the environment and resulting in significant savings to the landscape manager in storage, shipping and application. These compounds provide the landscape manager and golf course superintendent with products that fit their management needs. They are also more controllable and dependable, and help satisfy the public’s concerns regarding the environment. These are the products of the future.

Jerry Roche
Editor

Weed prevention in cool-season grasses
In cool-season weed control, an ounce of prevention is truly worth a pound of cure.
PAGE 4

Weed prevention in warm-season grasses
Southern turf managers no longer need to adapt cool-season weed controls to their warm-season turf.
PAGE 6

Controlling turf diseases
Preventative characteristics and spectrum of control are of utmost importance.
PAGE 8

Weed and disease control for ornamentals
How to preserve the intended impact of the landscape design with preemergence herbicides.
PAGE 10

Keeping landscapes picture perfect
Controlling unsightly and costly aquatic weeds that upset nature’s balance.
PAGE 12
Each year, unwanted grass and broadleaf weeds are a multimillion dollar problem. They rob beauty from lawns, golf courses and landscaped areas; steal water, nutrients and profits; and squander millions of dollars in labor as workers try to remove them.

But in weed control, an ounce of prevention truly is worth a pound of cure. That's why more and more professionals are using preemergence herbicide programs to control weed problems before they get started.

Turf management practices differ according to the turfgrass manager's needs. Length and spectrum of control are two of the most important variables turfgrass managers must decide upon when choosing a preemergence herbicide. For the turf manager who wants control of specific problem weeds such as crabgrass in the spring, or poa annua in the fall, the full season preemergence herbicide may not be necessary. Control of the target species is the concern. A herbicide that offers this control with a predictable length of residual control in the soil would be the best value to him and less costly than the full season control products. The predictable length of control also allows him to control the target weeds and still utilize cultural practices such as

Moila Country Club, St. Joseph, Mo.
reseeding or overseeding without concerns for germination of the desirable grass seeds.

The eight- to ten-week control with a single application of Balan® offers excellent crabgrass and poa annua control with maximum overseeding safety. This predictable length of control offers the turf manager flexibility to utilize the cultural practices he needs to maintain the best growing environment. Balan is available in a granular formulation from Elanco or sprayable formulations and fertilizer combinations from formulators. "I use Balan on all our tees, and we have 27 of them with 18 more opening soon," says Ed Benoit of Shadow Lake Country Club, Penfield, N.Y. "We're getting good results. I keep using the Elanco products, so they've got to be working. We have by far the most beautiful public course around, and Elanco products are helping to keep us beautiful."

On the other hand, some turf managers need a longer length of control. Golf course superintendents desiring crabgrass and goosegrass control, and lawn care operators who apply preemergence herbicides early in the season on their first rounds need a product with a longer residual. Cool season turf managers now have a product that fits this need in a new product from Elanco, called Team™. Team offers a longer residual with effective crabgrass and goosegrass control at an affordable price.

"I just started using Team this year, and it looks like it's doing a pretty good job," says Joe Norris of Jamestown Park Golf Course, Jamestown, N.Y. "If you time it right, it'll work fine. Timing is the key."

Team is now available on an easy-to-spread clay particle from Elanco. Team sprayable and Team in combination with granular fertilizers will be available in early 1986 through selected formulators.
Weed prevention in warm-season grasses

For years, southern turf managers have had to take products developed for northern turf and adapt them to their situation. Today, a number of products have been introduced specifically for warm-season turf maintenance.

The southern turf season is considerably longer than its northern counterpart. Management programs for both warm-season turf and winter overseeded turf are necessary. Preemergence herbicides, such as Balan, have long played an important role in both programs.

Southern turf managers typically apply preemergence herbicides in February or early March for crabgrass, barnyardgrass, and foxtail control. In June, they re-apply for goosegrass control. Finally, annual bluegrass is a threat from October through December.

In addition to length of control, preemergence herbicides vary in their effectiveness on target weeds. Balan has shown consistent effectiveness against crabgrass and Poa annua.

"This is the fifth year we've used two applications of Balan a year," notes Harold Neal of Tulsa Country Club, Tulsa, Okla. "My fairways and tees are just as clean as can be. We don't use any postemergence products at all, we've had such good success with Balan. And, we've also been using XL™ on problem goosegrass areas and get great control."

To meet the need for highly effective crabgrass and goosegrass control with one application, Elanco recently introduced XL. XL offers a longer residual and allows turf managers to control crabgrass and goosegrass with only one application timed preemerge in the early spring.

Neal reports "great control" of problem goosegrass areas using XL, as does Bill Bird of The Greens Country Club, Oklahoma City, Okla. "We have no weeds whatsoever," Bird says. "We used it last year under an experimental label, applying it around..."